

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

Brand: HALO

Report Number: P885939

Luminaire Tested: ML104LSFL9FS1E-TIR1D55WFL-TL1RDMW-400LM-3000K

Issue Date: 6/19/2024

Test Information

Test Method: LM-79-2019
Report Number: P885939
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-130)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 6/19/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML104LSFL9FS1E-TIR1D55WFL-TL1RDMW-400LM-3000K
Description: 1IN ROUND ML FLEX, SELECTABLE CCT, WITH 55D TIR, MATTE WHITE TRIM
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 405.5 lumens
Efficiency: N/A
Efficacy: 67.6 lumens/watt
Spacing Criteria (0/90/45): 0.81 / 0.81 / 0.77
Luminous Opening: Circular (Dia: 0.08' x H: 0')
CIE Type: Direct

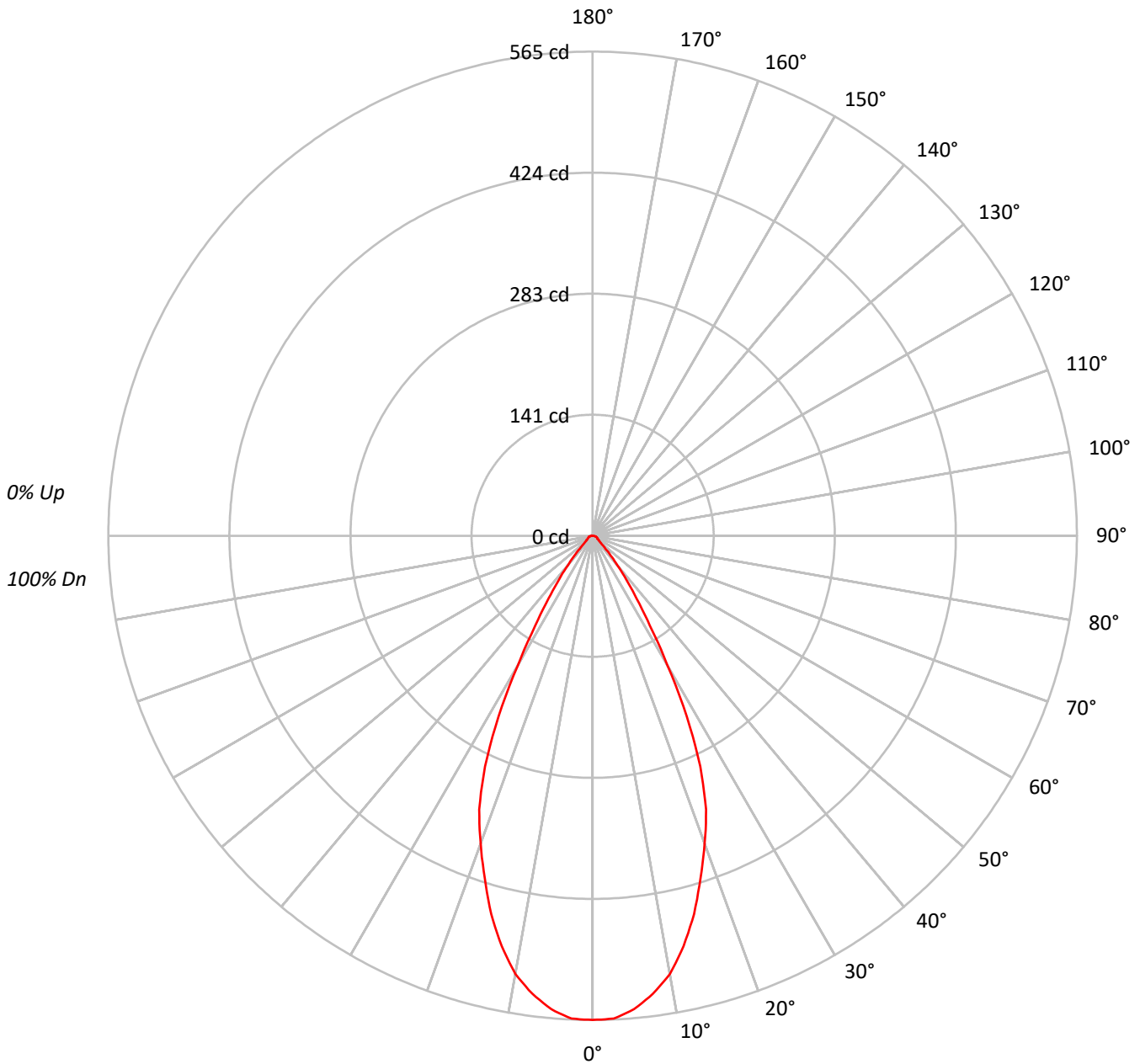
Input Watts (W): 6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20				
RC	80				70				50				30				10			0	
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100			
1	113	111	108	106	111	108	106	104	104	102	101	101	99	98	97	96	95	93			
2	108	103	99	95	106	101	97	94	98	95	92	95	92	90	92	90	88	87			
3	102	96	91	87	100	95	90	86	92	88	85	90	86	84	87	85	82	81			
4	98	90	85	80	96	89	84	80	87	82	79	85	81	78	83	80	77	76			
5	93	85	79	75	91	84	78	74	82	77	74	80	76	73	79	75	72	71			
6	88	80	74	70	87	79	74	70	78	73	69	76	72	69	75	71	68	67			
7	84	75	70	65	83	75	69	65	73	69	65	72	68	65	71	67	64	63			
8	81	71	66	62	79	71	65	61	70	65	61	69	64	61	68	64	61	59			
9	77	68	62	58	76	67	62	58	66	61	58	65	61	58	65	60	57	56			
10	74	64	59	55	73	64	59	55	63	58	55	62	58	55	62	58	55	53			

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	1115051
5°	1098707
10°	1040670
15°	933725
20°	802696
25°	646954
30°	397659
35°	215146
40°	115160
45°	58053
50°	35001
55°	28558
60°	24472
65°	28953
70°	30005
75°	32026
80°	23867
85°	22644

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 58053 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	51.8	12.8
10°-20°	126.7	31.2
20°-30°	131.3	32.4
30°-40°	59.4	14.6
40°-50°	18.0	4.4
50°-60°	7.5	1.9
60°-70°	5.8	1.4
70°-80°	4.0	1.0
80°-90°	1.1	0.3
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	309.8	76.4
0°-40°	369.2	91.0
0°-60°	394.7	97.3
0°-90°	405.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	405.5	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	565	
5°	555	52
15°	457	127
25°	297	131
35°	89	59
45°	21	18
55°	8	8
65°	6	6
75°	4	4
85°	1	1
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	565.0
2.5°	564.0
5°	554.6
7.5°	539.1
10°	519.3
12.5°	490.3
15°	457.0
17.5°	418.6
20°	382.2
22.5°	345.9
25°	297.1
27.5°	237.9
30°	174.5
32.5°	124.6
35°	89.3
37.5°	64.4
40°	44.7
42.5°	31.2
45°	20.8
47.5°	14.5
50°	11.4
52.5°	9.3
55°	8.3
57.5°	7.3
60°	6.2
62.5°	6.2
65°	6.2
67.5°	5.2
70°	5.2
72.5°	4.2
75°	4.2
77.5°	3.1
80°	2.1
82.5°	2.1
85°	1.0
87.5°	0.0
90°	0.0

Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report



Report Generated By 670245859 / DESKTOP-T8S5UU9

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— 0°-180°

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